Amendments to the Claims:

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method for managing experiments relating to automated processing technology, comprising the steps of:

    (A) receiving an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

    (B) obtaining an approval of the experiment order;

    (C) translating and storing at least a portion of the experiment order into processing data suitable for implementation by said automated environment; and

    (D) causing the experiment to be executed in conjunction with at least some portion of said base process by the automated environment, in accordance with said processing data.

2. (Original)   The method of claim 1, wherein the obtaining step further includes the steps of storing data defining the experiment order, distributing the experiment order to a plurality of users, obtaining changes to the experiment order from at least one of the users, and receiving the approval for the experiment order from at least one user.

3. (Previously Presented)   The method of claim 1, further comprising the step of attaching documents to the experiment order.

4. (Previously Presented)   The method of claim 1, further comprising the step of publishing information indicating a state change of the experiment order, responsive to a document attached to the experiment order or to a change in state of the experiment order.

5. (Original)   The method of claim 1, wherein the translating step further includes the step of receiving the processing data.

6. (Original)   The method of claim 5, wherein:

    the experiment produces at least one test product and at least one production product; and

    wherein the processing data includes an indication of the base process, the changes to the base process, and a split-off of a control set; and

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wherein the split-off of a control set produces the at least one production product according to the base process and the changes to the base process produce the at least one test product.

7.   (Original)   The method of claim 1, further comprising the step of receiving and storing the results of the execution of the experiment.

8.   (Original)   The method of claim 1, wherein the automated environment produces semiconductor technology.

9.   (Currently Amended) A computer-implemented system for managing experiments relating to automated processing technology, comprising:

    (A)   an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

    (B)   an approval of the experiment order, obtained in response to receipt of the experiment order;

    (C)   processing data suitable for implementation by said automated environment, translated from at least a portion of the experiment order; and

    (D)   wherein said automated environment causes the experiment to be executed in conjunction with at least some portion of said base process by the automated environment, in accordance with the processing data.

10.   (Original)   The system of claim 9, wherein the approval further includes stored data defining the experiment order, a distribution of the experiment order to a plurality of users, stored changes to the experiment order from at least one of the users, and received approval for the experiment order from at least one user.

11.   (Previously Presented)   The system of claim 9, further comprising at least one document attached to the experiment order.

12.   (Previously Presented)   The system of claim 9, further comprising information indicating a state change of the experiment order, published responsive to a document attached to the experiment order or to a change in state of the experiment order.

13. (Original) The system of claim 9, wherein the processing data is received from a user.

14. (Original) The system of claim 13, wherein:

the experiment produces at least one test product and at least one production product; and

wherein the processing data includes an indication of the base process, the changes to the base process, and a split-off of a control set; and

wherein the split-off of a control set produces the at least one production product according to the base process and the changes to the base process produce the at least one test product.

15. (Original) The system of claim 9, wherein the results of the execution of the experiment are received and stored.

16. (Original) The system of claim 9, wherein the automated environment produces semiconductor technology.

17. (Currently Amended) A computer-readable medium comprising instructions being executed by a computer, the instructions including a computer-implemented method for managing experiments relating to automated processing technology, the instructions for implementing the steps of:

(A) receiving an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

(B) obtaining an approval of the experiment order;

(C) translating and storing at least a portion of the experiment order into processing data suitable for implementation by said automated environment; and

(D) causing the experiment to be executed in conjunction with at least some portion of said base process by the automated environment in accordance with the processing data.

18. (Original) The medium of claim 17, wherein the obtaining step further includes the steps of storing data defining the experiment order, distributing the experiment order to a

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plurality of users, obtaining changes to the experiment order from at least one of the users, and receiving the approval for the experiment order from at least one user.

19.   (Previously Presented)   The medium of claim 17, wherein the computer program further comprises the step of attaching documents to the experiment order.

20.   (Previously Presented)   The medium of claim 17, wherein the computer program further comprises the step of publishing information indicating a state change of the experiment order, responsive to a document attached to the experiment order or to a change in state of the experiment order.

21.   (Original)   The medium of claim 17, wherein the translating step further includes the steps of receiving the processing data.

22.   (Original)   The medium of claim 21, wherein:

    the experiment produces at least one test product and at least one production product; and

    wherein the processing data includes an indication of the base process, the changes to the base process, and a split-off of a control set; and

    wherein the split-off of a control set produces the at least one production product according to the base process and the changes to the base process produce the at least one test product.

23.   (Original)   The medium of claim 17, wherein the computer program further comprises the step of receiving and storing the results of the execution of the experiment.

24.   (Original)   The medium of claim 17, wherein the automated environment produces semiconductor technology.

25.   (Currently Amended) A computer-implemented method for managing experiments relating to semiconductor technology, comprising the steps of:

    (A)   receiving an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

    (B)   obtaining an approval of the experiment order;

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(C)   translating and storing at least a portion of the experiment order into processing data suitable for implementation by said automated environment; and

(D)   causing the experiment to be executed in conjunction with at least some portion of said base process by the automated environment in accordance with the processing data;

(E)   wherein the obtaining step further includes the steps of storing data defining the experiment order, distributing the experiment order to a plurality of users, obtaining changes to the experiment order from at least one of the users, and receiving the approval for the experiment order from at least one user;

(F)   wherein the experiment produces at least one test product and at least one production product; and wherein the processing data includes an indication of the base process, the changes to the base process, and a split-off of a control set; and wherein the split-off of a control set produces the at least one production product according to the base process and the changes to the base process produce the at least one test product.

26.   (Currently Amended) A computer-implemented system for managing experiments relating to semiconductor technology, comprising:

(A)   an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

(B)   an approval of the experiment order, obtained in response to receipt of the experiment order;

(C)   processing data suitable for implementation by said automated environment, translated from at least a portion of the experiment order;

(D)   wherein said automated environment causes the experiment to be executed in conjunction with at least some portion of said base process by the automated environment in accordance with the processing data;

(E)   wherein the approval further includes stored data defining the experiment order, a distribution of the experiment order to a plurality of users, stored changes to the experiment

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order from at least one of the users, and received approval for the experiment order from at least one user; and

(F) wherein the experiment produces at least one test product and at least one production product; and wherein the processing data includes an indication of the base process, the changes to the base process, and a split-off of a control set; and wherein the split-off of a control set produces the at least one production product according to the base process and the changes to the base process produce the at least one test product.

27. (Currently Amended) A computer-readable medium comprising instructions being executed by a computer, the instructions including a computer-implemented method for managing experiments relating to automated processing technology, the instructions for implementing the steps of:

(A) receiving an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

(B) obtaining an approval of the experiment order;

(C) translating and storing at least a portion of the experiment order into processing data suitable for implementation by said automated environment; and

(D) causing the experiment to be executed in conjunction with at least some portion of said base process by the automated environment in accordance with the processing data;

(E) wherein the obtaining step further includes the steps of storing data defining the experiment order, distributing the experiment order to a plurality of users, obtaining changes to the experiment order from at least one of the users, and receiving the approval for the experiment order from at least one user;

(F) wherein the experiment produces at least one test product and at least one production product; and wherein the processing data includes an indication of the base process, the changes to the base process, and a split-off of a control set; and wherein the split-off of a control set produces the at least one production product according to the base process and the changes to the base process produce the at least one test product.

28. (Currently Amended) A computer-implemented apparatus for managing experiments relating to automated processing technology, comprising:

(A) means for receiving an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

(B) means for obtaining an approval of the experiment order;

(C) means for translating and storing at least a portion of the experiment order into processing data suitable for implementation by said automated environment; and

(D) means for causing the experiment to be executed in conjunction with at least some portion of said base process by the automated environment, in accordance with said processing data.

29. (Previously Presented) The method of claim 1, wherein the processing data is related to at least one of: a change to the base process itself, an addition to the base process, and an omission from the base process.

30. (Previously Presented) The system of claim 9, wherein the processing data is related to at least one of: a change to the base process itself, an addition to the base process, and an omission from the base process.

31. (Previously Presented) The medium of claim 17, wherein the processing data is related to at least one of: a change to the base process itself, an addition to the base process, and an omission from the base process.

32. (Currently Amended) A computer-implemented method for managing experiments relating to automated processing technology, comprising the steps of:

(A) receiving an experiment order, the experiment order including at least some pre-planned deviation from a base process capable of operating in an automated environment;

(B) translating and storing at least a portion of the experiment order into processing data suitable for implementation by said automated environment; and

(C)   causing the experiment to be executed in conjunction with at least some portion of said base process by the automated environment, in accordance with said processing data.

33.   (Previously Presented)   The method of claim 32, further comprising the step of publishing information indicating a state change of the experiment order, responsive to a document attached to the experiment order or to a change in state of the experiment order.